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INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT

JAN 1 1 2005 (as many sheets as necessary)

## Complete if Known

Application Number	10/827,121
Filing Date	April 16, 2004
First Named Inventor	John D. Baxter
Group Art Unit	<del>1631</del> 1656
Examiner Name	Carolyn L. Smith — ALEXANDER
Attorney Docket Number	407J-981114US
Date Submitted	January 7, 2005

## U.S. PATENT DOCUMENTS

Examiner Initials	Cite No.	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, lines, Where Relevant Passages or Relevant Figures Appeal
		Number	Kind Code (if known)			
AK	1	4,741,897		Andrews et al.	05-03-1988	
	2	4,766,121		Ellis et al.	08-23-1988	
	3	4,826,876		Ellis et al.	05-02-1989	
	4	4,910,305		Ellis et al.	03-20-1990	
	5	5,061,798		Emmett et al.	10-29-1991	
	6	5,116,828		Miura et al.	05-26-1992	
	7	5,171,671		Evans et al.	12-15-1992	
	8	5,284,999		Chin et al.	02-08-1994	
	9	5,312,732		Evans	05-17-1994	
	10	5,322,933		Davies et al.	06-21-1994	
	11	5,403,925		Ozato	04-04-1995	
	12	5,438,126		DeGroot et al.	08-01-1995	
	13	5,463,564		Agrafiotic et al.	10-31-1995	
	14	5,466,861		Dawson et al.	11-14-1995	

## FOREIGN PATENT DOCUMENTS

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		Office	Number	Kind Code (if known)				
AK	15	EP	355,628			08-11-1989		
	16	WO	97/21993		Regents of the University of California	06-19-1997		
	17	WO	98/07435		Regents of the University of California	02-26-1998		
	18	WO	98/57919		Regents of the University of California	12-23-1998		


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OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T
	19	ANDREA ET AL. (1979) "A model for Thyroid Hormone-Receptor Interactions." <i>J. Med. Chem.</i> 22: 221-232	
	20	APRILETTI ET AL (1988) "Large Scale Purification of the Nuclear Thyroid Hormone Receptor From Rat Liver and Sequence-specific Binding of the Receptor to DNA." <i>J. Biol. Chem.</i> 263:9409-9417.	
	21	APRILETTI ET AL. (1995) "Expression of the rat $\alpha 1$ Thyroid Hormone Receptor Ligand Binding Domain in <i>Escherichia coli</i> and the Use of a Ligand-Induced ...." <i>Protein Expression and Purification</i> 6:363-370	
	22	AU-FLIEGNER ET AL. (1993) "The Conserved Ninth C-Terminal Heptad in Thyroid Hormone and Retinoic Acid receptors Mediates Diverse Responses by Affecting Heterodimer but Not Homodimer Formation." <i>Mol Cell Biol.</i> 13:5725-5737.	
	23	BANIAHMAD ET AL. (1995) "The $\tau 4$ Activation Domain of the Thyroid Hormone Receptor is Required for Release of a Putative Corepressor(s) Necessary for Transcriptional Silencing." <i>Mol. Cell Biol</i> 15:76-86.	
	24	BARETTINO ET AL. (1994) "Characterization of the Ligand-dependent Transactivation Domain of Thyroid Hormone receptor." <i>EMBO Journal</i> 13:3039-3049.	
	25	BARKER ET AL. (1960) "Thyroxine Antagonism by Partially Iodinated Thyronines and Analogues." <i>Ann N.Y. Acad. Sci.</i> 86:545-562.	
	26	BECK-PECCOZ ET AL. (1994) "Nomenclature of Thyroid Hormone Receptor $\beta$ -Gene Mutations in Resistance to Thyroid Hormone. . ." July 10-11 1993 Cambridge, United Kingdom. <i>J. Clin. Endocrinol Metab.</i> 78:990-993.	
	27	BHAT ET AL. (1995) "Interaction of Thyroid Hormone Nuclear Receptor with Antibody: Characterization of the Thyroid Hormone Binding Site." <i>Biochem. Biophys. Res Commun.</i> 210:464-471.	
	28	BLAKE AND OATLEY (1977) "Protein-DNA and Protein-Hormone Interactions in prealbumin: a Model of the Thyroid Hormone Nuclear Receptor?" <i>Nature</i> 268:115-120.	
	29	BLAKE ET AL. (1978) "Structure of Prealbumin: Secondary, Tertiary and Quaternary Interactions Determined by Fourier Refinement at 1.8 Å" <i>J. Mol. Biol.</i> 121:339-356.	
	30	BOLGER ET AL. (1980) Molecular Interactions Between Thyroid Hormone Analogs and the Rat Liver Nuclear Receptor." <i>Journal of Biological Chemistry</i> 255(21): 10271-10278.	
	31	BOURGUET ET AL. (1995) "Crystal Structures of the Ligand-Binding Domain of the Human Receptor RXR- $\alpha$ ." <i>Nature</i> 375:377-382.	
	32	BRENT (1994) "The Molecular Basis of Thyroid Hormone Action." <i>New England Journal of Medicine</i> 331:847-853.	
	33	BRUNGER ET AL. (1987) "Crystallographic R Factor Refinement by Molecular Dynamics." <i>Science</i> 236:458-460.	

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34	CASANOVA ET AL. (1994) "Functional Evidence for Ligand-Dependent Dissociation of Thyroid Hormone and Retinoic Acid Receptors from an Inhibitory Cellular Factor." <i>Mol Cell Biol.</i> 14:5756-5765.
35	CAVAILLES ET AL. (1995) "Nuclear Factor RIP140 Modulates Transcriptional Activation by the Estrogen Receptor." <i>EMBO Journal</i> 14:3741-3751.
36	CHANG ET AL. (1997) "A Thyroid Hormone Receptor Coactivator Negatively Regulated by the Retinoblastoma Protein." <i>Proceedings of the National Academy of Sciences USA</i> 94(17): 9040-9045.
37	CHIELLINI ET AL. (1998) "A High-Affinity Subtype-Selective Agonist for the Thyroid Hormone Receptor." <i>Chemistry and Biology</i> 5(6): 299-306.
38	COLLABORATIVE COMPUTATIONAL PROJECT, N. 4. (1994) "The CCP4 Suite: Programs for Protein Crystallography." <i>Acta Crystallogr D</i> 50:760-763.
39	COLLINGWOOD ET AL. (1994) Spectrum of Transcriptional, Dimerization, and Dominant Negative Properties of Twenty Different Mutant Thyroid Hormone $\beta$ -Receptors in Thyroid Hormone Resistance Syndrome." <i>Mol Endocrinol</i> 8:1262-1277.
40	COWAN ET AL. (1991) "Improved Methods for Building Protein Models in Electron Density Maps and the Location of Errors in These Models." <i>Acta Crystallogr A</i> 47:110-119.
41	COWTAN (1994) <i>Journ CCP4 and ESR-EACBM Newsletter of Protein Crystallography</i> 31:34-38.
42	CROWE ET AL. (1994) "6xHis-Ni-NTA Chromatography as a Superior Technique in Recombinant Protein Expression/Purification." <i>Methods in Molecular Biology</i> 31:371-387.
43	DAMM AND EVANS (1993) "Identification of a Domain Required for Oncogenic Activity and Transcription suppression by v-erbA and Thyroid-Hormone Receptor $\alpha$ ." <i>Proceedings of the National Academy of Sciences USA</i> 90:10668-10672.
44	DANIELIAN ET AL. (1992) "Identification of a Conserved Region Required for Hormone Dependent Transcriptional Activation by Steroid Hormone Receptors." <i>EMBO Journal</i> 11:1025-1033.
45	DIETRICH ET AL. (1977) "Thyroxine Analogues. 23. Quantitative Structure-Activity Correlation Studies of in Vivo and in Vitro Thyromimetic Activities." <i>J. Med. Chem.</i> 20:863-880.
46	DURAND ET AL. (1994) "Activation Function 2 (AF-2) of Retinoic Acid Receptor and 9-cis Retinoic Acid Receptors: Presence of a Conserved Autonomous Constitutive Activated Domain ...." <i>EMBO Journal</i> 13:5370-5382.
47	EVANS (1988) "The Steroid and Thyroid Hormone Receptor Superfamily." <i>Science</i> 240:889-895.
48	FAWELL ET AL. (1990) "Characterization and Colocalization of Steroid Binding and Dimerization Activities in the Mouse Estrogen Receptor." <i>Cell</i> 60:953-962.
49	FORMAN AND SAMUELS (1990) "Interactions Among a Subfamily of Nuclear Hormone Receptors: The Regulatory Zipper Model." <i>Mol. Endocrinol</i> 4:1293-1301.
50	GEWIRTH AND SIGLER (1996) "The Basis for Half-Site Specificity Explored Through a Non-Cognate Steroid Receptor-DNA Complex." <i>Nature Structural Biology</i> 2:386-394.
51	GLASS (1994) "Differential Recognition of Target Genes by nuclear Receptor Monomers, Dimers, and Heterodimers." <i>Enocr. Rev.</i> 15:391-407.

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52	HAJDUK ET AL. (1997) "Discovering High Affinity Ligands for Proteins." <i>Science</i> 278:497-499.
53	HAYASHI ET AL. (1994) "Mutations of CpG Dinucleotides Located in the Triiodothyronine (ts)-Binding Domain of the Thyroid Hormone Receptor. . ." <i>J. Clin. Invest.</i> 94:607-615.
54	HEERY ET AL. (1997) "A Signature Motif in Transcriptional Co-activators Mediated Binding to Nuclear Receptors." <i>Nature</i> 387:733-736.
55	HOLLENBERG ET AL. (1995) "Ligand-Independent and -Dependent Functions of Thyroid Hormone Receptors Isoforms Depend Upon Their Distinct Amino Termini." <i>J. Biol. Chem.</i> 270(24):14274-14280.
56	HORWITZ (1992) "The Molecular Biology of RU486." <i>Endocrine</i> 13:146-163
57	JACKSON (1997) "Contributions of Protein Structure-based drug Design to Cancer Chemotherapy." <i>Seminats on Oncology</i> 24(2): L164-172.
58	JANCARIK AND KIM (1991) "Sparse Matrix Sampling: A screening Method for Crystallization of Proteins." <i>J. Appl. Crystallogr</i> 24:409-411.
59	JANKNECHT (1991) "Rapid and Efficient Purification of Native Histidine-Tagged Protein Expressed by Recombinant Vaccinia Virus." <i>Proceeding of the National Academy of Sciences USA</i> 88:8972-8976.
60	JONES ET AL. (1991) "Improved Methods for Building Protein Models in Electron Density Maps and the Location of Error in These Models." <i>ACTA Cryst.</i> 47:110-119.
61	JONES ET AL. (1996) "Structure-Based Design of Lipophilic Quinazoline Inhibitors of Thymidylate Synthase." <i>J. Med. Chem.</i> 39(4): 904-917.
62	JORGENSEN (1978) "Thyroid Hormones and Analogs IN 6 Hormonal Proteins and Peptides." <i>Thyroid Hormones</i> 150-151.
63	JORGENSEN (1978) "Thyroid Hormones and Analogs." <i>Hormonal Peptides and Proteins</i> 107-204 (Academic Press, New York,)
64	JORGENSEN ET AL. (1976) "The Nature of the thyroid Hormone Receptor." <i>Thyroid Research</i> 378:303-306.
65	KABSCH (1993) "Automatic Processing of Rotation Diffraction Data From Crystals of Initially Unknown Symmetry and Cell Constants." <i>Appl. Crystallogr</i> 26:795-800.
66	KABSCH AND SANDER (1983) "Dictionary of Protein Secondary Structure: Pattern Recognition of Hydrogen-Bonded and Geometrical features." <i>Biopolymers</i> 22:2577-2637.
67	KAKIZAWA ET AL. (1997) "Ligand-dependent Heterodimerization of Thyroid Hormone Receptor and Retinoid X Receptor." <i>J. Biol. Chem.</i> 272(38): 23799-23804.
68	KEDIEL ET AL. (1994) "Different Agonist and Antagonist Induced Conformational Changes in Retinoic Acid Receptors Analyzed by Protease Mapping." <i>Mol Cell Biol</i> 14:287-298.
69	LASKOWSKI ET AL. (1993) "Procheck" a Program to Check the Stereochemical Quality of Protein Structures." <i>J. Appl. Crystallogr</i> 26:283-291.
70	LATHAM ET AL. (1984) "Development of Support Matrices for Affinity Chromatography of Thyroid Hormone Receptors." <i>J. Biol Chem.</i> 256:12088-12093.
71	LAUDET (1992) "Evolution of the Nuclear Receptor Gene Superfamily." <i>EMBO Journal</i> 11:1003-1013.

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72	LEDOUARIN ET AL. (1995) "The N-Terminal Part of TIF1, a Putative Mediator of the Ligand-Dependent Activation Function . . ." <i>EMBO Journal</i> 14:2020-2033.		
73	LEE (1995) "Interaction of Thyroid-Hormone Receptor with a Conserved Transcriptional Mediator." <i>Nature</i> 374:91-94.		
74	LEE ET AL. (1995) "Two Classes of Proteins Dependent on Either the Presence or Absence of thyroid Hormone for Interaction with the Thyroid Hormone Receptor." <i>Molec. Endocrinol</i> 9:243-254.		
75	LEESON ET AL. (1989) "Selective Thyromimetics." <i>J. Med. Chem</i> 32:320-336.		
76	LEESON ET AL. (1989) "Thyroid Hormone Analogues." <i>J. Med. Chem.</i> 31:37-54.		
77	LEITMAN ET AL. (1991) "Identification of a Tumor Necrosis Factor-Responsive Element in the Tumor Necrosis Factor $\alpha$ Gene." <i>J. Biol Chem.</i> 266:9343.		
78	LENG ET AL. (1993) "Ligand-Dependent Conformational Changes in Thyroid Hormone and Retinoic Acid Receptors..." <i>J Steroid. Biochem. Molec. Biol.</i> 46:643-661.		
79	LENG ET AL. (1995) "Mouse Retinoid X Receptor Contains a Separable Ligand-Binding and Transactivation Domain In Its E Region." <i>Mol. And Cellular Biol.</i> 15:255-263.		
80	LEWIS AND WALLBANK (1987) "Formation of Quinol Ethers Using (Diacetoxyiodo) Benzene." <i>Synthesis</i> 1103.		
81	LIN ET AL. (1991) "An Essential Role of Domain D in the Hormone-Binding Activity of Human $\beta$ 1 Thyroid Hormone Nuclear Receptor." <i>Mol. Endocrinol</i> 5:485-492.		
82	LIN ET AL. (1997) "A conformatinal Switch in Nuclear Hormone Receptors is Involved in Coupling Hormone Binding to Corepressor Release." <i>Mol. Cell. Biol</i> 17(1): 6131-6138		
83	LLEYWEGT ET AL. (1994) "OOPS-a-dasy" <i>ESF/CCP4 Newsletter</i> pp. 20-24.		
84	LUISI ET AL. (1991) "Crystallographic Analysis of the Interaction of the Glucocorticoid Receptor with DNA.: <i>Nature</i> 352:497-505.		
85	MCGRATH ET AL. (1989) "Rapid Preparation of Proteins for Crystallization Tials." <i>Biotechniques</i> 7:246-247.		
86	MCGRATH ET AL. (1994) "Preliminary Crystallographic Studies of the Ligand-Binding Domain of the Thyroid Hormine Receptor Complexed With Triiodothyronine." <i>J. Mol. Biol.</i> 237:236-239.		
87	MCREE ET AL. (1993) <i>Practical Protein Crystallography</i> Academic Press, N.Y. Chapters 1-3.		
88	MEIER ET AL. (1992) "Variable Transcriptional Activity and Ligand Binding of Mutant $\beta$ 1 3. 5. 3'-Triiodothyronine Receptors . . ." <i>Mol Endocrinol</i> 6:248-258.		
89	MONACO ET AL. (1995) "Structure of a Complex of Two Plasma Proteins: Transthyretin and Retinol-Binding Protein." <i>Science</i> 268:1039-1041.		
90	MURSHUDOV ET A. (1996) "Application of Maximun Likelihood Methods for Macromolecular Refinements." <i>Refinement of Protein Structures</i> pp. 1-12.		
91	NAVAZA (1994) "AmoRe: an Automated Package for Molecular Replacement." <i>Acta Crystallographica Section A-Funamentals for crystallography</i> 50:157-163.		
92	NICHOLLS ET AL. (1991) "Protein Folding and Association: Insites From the Interfacial and Thermodynamic Properties of Hydrocarbons." <i>Proteins</i> 11:281-296.		
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93	O'DONNELL ET AL. (1991) "Thyroid Hormone Receptor Mutations that Interfere with Transcriptional Activation Also Interfere with Receptors." <i>Mol Endocrinol</i> 5:94-99.
94	ONATE ET AL. (1995) "Sequence and characterization of a Coactivator for the Steroid Hormone Receptor Superfamily." <i>Science</i> 270:1354-1357.
95	OTWINOSKI (1991) "Maximum Likelihood Refinement of Heavy Atom Parameters." <i>Proceedings of the CCP4 Study Weekend: Data Collection and Processing</i> 80-86.
96	OTWINOSKI (1993) "Oscillation Data Reduction Program." <i>Proceedings of the CCP4 Study Weekend: Data Collection and Processing</i> 56-62.
97	RASTINEJAD ET AL. (1995) "Structural Determinants of Nuclear Receptor Assembly on DNA Direct Repeats." <i>Nature</i> 375:203-211.
98	RAYNAUD ET AL. (1986) "The Design and Use of Sex-Steroid Antagonist." <i>J. Steroid Biochem</i> 25:811-833.
99	REFETTOFF ET AL. (1993) "The Syndromes of Resistance to Thyroid Hormone." <i>Endocr. Rev.</i> 14:248-399.
100	RIBEIRO ET AL. (1992) "Thyroid Hormone Alters in Vitro DNA Binding of Monomers and dimers of Thyroid Hormone Receptors." <i>Mol. Endocrinol.</i> 6:1142-1152.
101	RIBEIRO ET AL. (1995) "The Molecular Biology of Thyroid Hormone Action." <i>Ann. N.Y. Acad. Sci.</i> 758:366-389.
102	RIBEIRO ET AL. (1995) "The Nuclear Hormone Receptor Gene Superfamily." <i>Annu. Rev. Med.</i> 46:443-453.
103	RIBEIRO ET AL. (1998) "Mechanism of Thyroid Hormone Action: Insights from X-Ray Crystallographic and Functional Studies." <i>Recent Progress in Hormone Research</i> 53:351-394.
104	ROBESSEAU ET AL. (1972) "Glucocorticoid Receptors: Relations Between Steroid Binding and Biological Effects." <i>J. Mo. Biol.</i> 67:99-115.
105	SAATCIOGLU ET AL. (1993) "A Conserved C-Terminal Sequence that is Deleted in v-ErbA is Essential for the Biological Activities of c-ErbA (The Thyroid Hormone Receptor)." <i>Mol. Cell. Biol.</i> 13:3675-3685.
106	SCHWABE ET AL. (1993) "The Crystal Structure of the Estrogen Receptor DNA-Binding Domain Bound to DNA: How Receptors Discriminate Between Their Response Elements." <i>Cell</i> 75:567-578.
107	SEIELSTAD ET AL. (1995) "Molecular Characterization by Mass Spectrometry of the Human Estrogen Receptor Ligand-Binding Domain Expresses in Escherichia coli." <i>Molecular Endocrinology</i> 6:647-658.
108	SELMI AND SAMUELS (1991) "Thyroid Hormone Receptor/ and v-erbA." <i>J. Biol. Chem</i> 266:11589-11593.
109	SHIBATA ET AL. (1997) "Role of Co-activators and Co-repressors in the Mechanism of Steroid/Thyroid Receptor Action." <i>Recent Progress in Hormone Research</i> 52:141-164.
110	STEPHEN ET AL. (1992) "Reduction of Cardiovascular and Thyroxine-Suppressing Activities of L-t3 by Liver Targeting with Cholic Acid." <i>Biochem. Pharmacol.</i> 13:1969-1974.
111	SWAFFIELD ET AL. (1995) "A Highly Conserved ATPase Protein as a Mediator Between Acidic Activation Domains and the TATA-Binding Protein." <i>Nature</i> 274:88-91.

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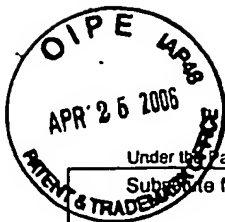
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112	TAGAMI ET AL. (1997) "Nuclear Receptor Corepressors Activate Rather than Suppress Basal Transcription of Genes that are Negatively Regulated by Thyroid Hormone." <i>Mol. Cell Biol.</i> 17(5): 2642-2648.	
113	TONEY ET AL. (1993) "Conformational Changes in Chicken Thyroid Hormone Receptors $\alpha$ 1 Induced by Binding to Ligand or to DNA." <i>Biochemistry</i> 32:2-6.	
114	TSAL AND O'MALLEY (1994) "Molecular Mechanism of Action of Steroid/Thyroid Receptors Superfamily Members." <i>Ann Rev. Biochem.</i> 63:451-486.	
115	WAGNER ET AL. (1965) "A Structural Role for Hormone in the Thyroid Hormone Receptor." <i>Nature</i> 208(5056): 670-697.	
116	WESTERFIELD ET AL. (1965) "New Assay Procedures for Thyroxine Analogs." <i>Endocrinology</i> 77:802.	
117	YOKOYAMA ET AL. (1995) "Synthesis and Structure-Activity Relationship of Oxamic Acid and Acetic Acid Derivatives Related to L-Thyronine." <i>J. Med. Chem.</i> 38:695-707.	
118	ZENKIE ET AL. (1990) "v-erbA Oncogene Activation Entails the Loss of Hormone-Dependent Regulator Activity of c-erbA." <i>Cell</i> 61:1035-1049.	
119	ZHU ET AL. (1997) "The Differential Hormone-dependent Transcriptional Activation of Thyroid Hormone Receptor Isoforms is Mediated by Interplay of their Domains." <i>J. Biol. Chem.</i> 272(14): 9048-9054.	

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INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT

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## Complete if Known

Application Number	10/827,121
Filing Date	April 16, 2004
First Named Inventor	John D. Baxter
Group Art Unit	1631
Examiner Name	Carolyn L. Smith
Attorney Docket Number	407J-981114US
Date Submitted	April 20, 2006

## U.S. PATENT DOCUMENTS

Examiner Initials	Cite No.	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code (if known)			

## FOREIGN PATENT DOCUMENTS

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		Office	Number	Kind Code (if known)				

## OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T
AK	1	ANDREWS ET AL. (1989) "Morpheus: a conformation-activity relationship and receptor modeling package." <i>Journal of Molecular Graphics</i> , 7: 138-295.	
AK	2	APRILETTI ET AL. (1998) "Molecular and Structural Biology of Thyroid hormone Receptors." <i>Clinical and Experimental Pharmacology and Physiology</i> , 25(Suppl.): S2-S11.	
AK	3	GOLDSTEIN ET AL. (1993) "Three-dimensional model for the hormone binding domains of steroid receptors." <i>Proceedings of the National Academy of Sciences, USA</i> , 90: 9949-9953.	
AK	4	HERRMANN AND PARKER (1961) "Effect of Thyroxine Analogues on Serum and Tissue Cholesterol in the Rat." <i>Archives Internationales de Pharmacodynamie et de Therapil</i> , 133: 284-295.	
AK	5	NOMURA ET AL. (1996) "Amino Acid Substitutions of Thyroid Hormone Receptor- $\beta$ at Codon 435 with Resistance to Thyroid Hormone Selectively Alter Homodimer Formation." <i>The Endocrine Society</i> , 137(10): 4082-4046.	

Examiner Signature		Date Considered	10/19/2006
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



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	Application Number		10/827,121	
	Filing Date		April 16, 2004	
	First Named Inventor		John D. Baxter	
	Group Art Unit		1631-1656	
	Examiner Name		Carolyn L. Smith Alexander Kim	
	Attorney Docket Number		407J-981114US	
Date Submitted		January 7, 2005		

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		Number	Kind Code (if known)			
	AA	5,298,429		Evans et al.	03-29-1994	
	AB	5,307,287		Cramer III et al.	04-26-1994	
	AC	5,459,077		Moore et al.	10-17-1995	

FOREIGN PATENT DOCUMENTS								
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	AD	BOURGUET ET AL. (1995) "Purification, functional characterization and crystallization of the ligand binding domain of the retinoid X receptor." <i>Protein Expression and Purification</i> 6: 604-608.	
AK	AE	CARPRIK AND GARIÉPY (1993) "The Escherichia coli heat-stable enterotoxin is a long-lived superagonist of guanylin." <i>Infection and Immunity</i> 61(11): 4710-4715.	
SK	AF	CHATURVEDI ET AL. (1985) "Synthesis and biological evaluation of the superagonist [N alpha-chlorotriazinylaminofluorescein-Ser1, Nle4, D-Phe7]-alpha-MSH." <i>Journal of Pharmaceutical Sciences</i> 74(3):237-240.	
SK	AG	JORGENSEN ET AL. (1974) "Thyroxine Analogs. 22. Thyromimetic Activity of Halogen-Free Derivatives of 3, 5-Dimethyl-L-thyronine." <i>Journal of Medical Chemistry</i> 17(4): 434-439.	
AK	AH	LOHIYA ET AL. (1991) " Experience with a potent LH-RH agonist, buserelin, alone and in combination with testosterone for antispermatogetic activity, reversibility and toxicity in langur monkey." <i>Contraception</i> 43(2):187-200.	
SK	AI	NESTOR ET AL. (1982) "Synthesis and biological activity of some very hydrophobic superagonist analogues of luteinizing hormone-releasing hormone." <i>Journal of Medicinal Chemistry</i> 25(7):795-801.	
SK	AJ	PUDDICOMBE ET AL. (1996) "The Interaction of an epidermal growth factor/transforming growth factor alpha tail chimers with the human epidermal growth factor receptor reveals unexpected complexities." <i>Journal of Biological Chemistry</i> 271(48): 30392-30394.	
SK	AK	ROBINSON ET AL. (1995) "Mass Spectrometric and biological characterization of guinea-pig corticotropin." <i>Regulatory Peptides</i> 56:89-97.	
	AL	SAGGIO ET AL. (1997) "Adenovirus-mediated gene transfer of a human IL-6 antagonist," <i>Gene Therapy</i> 4:839-845.	
SK	AM	SAWYER ET AL. (1982) "[half-Cys4, half-Cys10]-alpha-melanocyte-stimulating hormone: a cyclic alpha-melanotrophic exhibiting superagonist biological activity." <i>Proceedings of the National Academy of Science USA</i> 79:1751-1755.	

Examiner Signature		Date Considered	10/19/06
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